## METHOD AND SYSTEM FOR OPTIMIZED PRE-SATURATION IN MR WITH CORRECTED TRANSMITTER FREQUENCY OF PRE-PULSES

## ABSTRACT OF THE DISCLOSURE

A method, system and computer program product is provided for optimizing pre-saturation in Magnetic Resonance Imaging. The optimization is done by setting a correct transmitter frequency of RF pre-pulses for all scan slices. A B.sub.0 magnetic field map for each scan slice of a scan volume is obtained from the B.sub.0 magnetic field distribution in the scan volume. The B.sub.0 magnetic field maps are used to calculate the median value of the B.sub.0 magnetic field over each scan slice. A first frequency of RF pre-pulses is obtained by a standard procedure. A second frequency of RF pre-pulses is then calculated for each scan slice by adding the median value of the B.sub.0 magnetic field over the scan slice to the first frequency of RF pre-pulses. Thereafter RF pre-pulses at the second frequency is applied to the scan slice.